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(12) United States Patent Basler et al.

(54) CONTINUOUS ROD TRANSPORT SYSTEM

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(56) References Cited

U.S. PATENT DOCUMENTS

3,186,659 A 3,254,851 A 6/1965 Arnold 6/1966 Caperton (Continued)

FOREIGN PATENT DOCUMENTS

AU 2008100774 10/2008 CA 885866 11/1971 (Continued)

OTHER PUBLICATIONS

Partial European Search Report from EP appl. No. EP 10251670, dated Dec. 16, 2010.

(Continued)

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(57) ABSTRACT

A transport system has a dedicated trailer for transporting a small transport reel (i.e., <18-ft in diameter) of continuous rod to the field. The trailer has a pedestal that can pivot the reel. A hub motor on the pedestal can turn the reel, and a transfer unit and rod bender on the trailer can curve or straighten the rod when being fed into or out of the reel. A power and hydraulic system operates the various hydraulic components on the trailer. In other aspects, the transport system includes stands that can hold the small transport reels on a trailer within a defined transport envelope. When empty, these stands can be stacked on top of one another on the trailer for return to a facility.

30 Claims, 26 Drawing Sheets



